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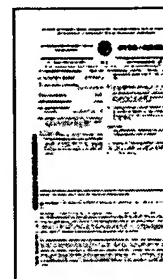
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View: [Expand Details](#) | [INPADOC](#) | Jump to: Go to: [Derwent](#) [Email](#)Title: **WO0101931A2: TWO-PHASE HAIR OR SKIN CARE AGENT CONTAINING PERFUME** [\[German\]](#) [\[French\]](#)Derwent Title: Cosmetic agent with separate perfume oil and carrier phases to improve stability of the perfume oil during storage [\[Derwent Record\]](#)Country: **WO** World Intellectual Property Organization (WIPO)Kind: **A2** Publ. of the Int. Appl. without Int. search REP. i (See also: [WO0101931A3](#))Inventor: **KOSCHIK, Achim**; Heidelberger Landstrasse 101 C, D-64297 Darmstadt, Germany  
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[News, Profiles, Stocks and More about this company](#)Published / Filed: **2001-01-11 / 2000-06-27**Application Number: **WO2000EP0005974**IPC Code: **A61K 7/00**;ECLA Code: **A61K7/46P**;Priority Number: 1999-07-01 **DE1999019930438**Abstract: A cosmetic hair or skin care agent comprising a continuous, transparent, clear or opaque, highly-viscous gel outer phase (A) and a homogeneous inner phase (B) containing a perfume oil and which can be seen through said outer phase (A), being arranged in a regular manner. Phases (A) and (B) do not automatically mix with each other during a period of contact of at least 3 months at 30°C. The inventive separation of perfume oil and carrier substances and the dosed addition of the perfume oil which is contained in the inner phase to the final product just before application in accordance with the prescribed application results in olfactory stability of said perfume oil during storage and a strong fragrance on the skin and hair. [\[German\]](#) [\[French\]](#)Attorney, Agent or Firm: **WELLA AKTIENGESELLSCHAFT**;[INPADOC](#) [Show legal status actions](#)Get Now: [Family Legal Status Report](#)

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**European patent:** AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
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Description  
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**+ Parfümhaltiges Mittel zur Behandlung der Haare oder der Haut mit zwei Phasen**

Kosmetisches Mittel zur Behandlung der Haare oder der Haut, welches eine kontinuierliche, transparente klare oder opake, hochviskose gelförmige äußere Phase (A) und darin eine durch die Phase (A) hindurch sichtbare, homogene parfümölhaltige innere Phase (B) enthält, wobei sich die Phasen (A) und (B) während eines Kontaktes von mindestens drei Monaten bei 30 Grad Celsius nicht selbsttätig miteinander vermischen.

Other Abstract  
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# Chemical Translations



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## **Scented Two-Phase Hair or Skin Treatment Preparation**

Translated from the German for  
**STRIKER, STRIKER & STENBY**

## SCENTED TWO-PHASE HAIR OR SKIN TREATMENT PREPARATION

Cosmetic hair or skin treatment preparation comprising a continuous, transparent, clear or opaque, highly viscous outer gel phase (A) and therein a homogeneous, perfume oil-containing inner phase (B), clearly visible through said phase (A), wherein phases (A) and (B) do not spontaneously mix with one another while in mutual contact for at least 3 months at 30 °C.

EP-A-0 900 744 discloses cosmetic preparations containing in a transparent, translucent or opaque base visible microparticles with an average diameter of about 0.1 to 4 mm and which when dispensed by means of a manually actuated pumping device are broken down. This is said to provide an entirely homogeneous distribution in the base.

If the microparticles are in the form of capsules, then, after the mixing, interfering capsule walls can be observed in the mixture. Moreover, the microparticles are very small and, hence, can hardly be seen. Furthermore, the microparticles contain no perfume oil, and nothing is said about a uniform distribution of the microparticles.

Applicant has for an object to provide a cosmetic preparation for hair or skin treatment wherein during storage the perfume oil is not present in the form of a mixture with the preparation constituents that are harmful to it, but is mixed with them only just before use. After mixing, no interfering constituents, such as capsule walls, are present in the mixture, and the full scent of the perfume oil develops only just before and during use. Moreover, the preparation exists in two phases and gives a good optical impression in that the enclosed phase is preferably uniformly distributed.

Surprisingly, we have now found that the said objective is solved in outstanding manner by means of a cosmetic hair or skin treatment preparation comprising a continuous, transparent, clear or opaque, highly viscous outer gel phase (A) and therein a homogeneous inner phase (B) visible through phase (A), characterized in that phase (B)

- has an optical appearance different from that of outer phase (A),
- contains at least 0.5 wt.% of a perfume oil, based on the weight of phase (B), and
- has no outer covering, and

that phases (A) and (B) do not spontaneously mix with one another while in mutual contact for at least 3 months at 30 °C.

Preferably, the make-up of the cosmetic preparation is such that phases (A) and (B) can readily be mixed mechanically with one another, which is particularly easy to do when the viscosity of the inner phase (B) is the same as, or a lower than, that of the outer phase (A). By ready miscibility is meant, in particular, that good mixing is attained by stirring for 5 to 30 seconds, for example with a spoon,

or by extrusion through a suitable mixing nozzle or a suitable mixing valve, both in themselves known. Advantageously, phase (A) has a viscosity of at least 5,000 mPa.s at 25 °C, measured with a Haake model VT 501 rotational viscometer at a shearing rate of 12.9 per second. Phase (A) preferably has a viscosity of 5,000 to 100,000 mPa.s at 25 °C, measured with a Haake model VT 501 rotational viscometer at a shearing rate of 12.9 per second. Most preferably, phase (A) presents a yield point which should have a value of at least 1000 mPa.

It is advantageous for both the optical impression and a minimum contact surface area between phase (A) and phase (B) if phase (B) is present in individual, discrete volumes amounting to at least 0.1 cm<sup>3</sup> and preferably from 0.2 to 2 cm<sup>3</sup>. Most preferably, the discrete volumes of phase (B) are spherically shaped and have a diameter of at least 5 mm.

The two-phase preparations which contain discrete volumes of the inner phase in a highly viscous outer phase are made in a known manner by incorporating the inner phase (B) into the outer phase (A) with the aid of one or several nozzles. By the arrangement of the nozzles and a programmed delivery of phase (B) with a simultaneous, programmed movement of the nozzles, any arrangement and shape of phase (B) in phase (A) can be obtained. Preferably, the inner phase (B) is distributed uniformly in the outer phase (A). A particularly advantageous arrangement of the discrete, spherically shaped volumes of phase (B) in a preparation is shown in Figure 1.

Preferably, the preparation of the invention is a hair or skin treatment preparation which, preferably during use, evokes a special odor sensation in the user. For this effect, it is advantageous if the perfume oil is present in an amount of at least 1 wt.%, based on phase (B). It is particularly preferred if the perfume oil is present in an amount from 1 to 5 wt.%, based on phase (B).

What is required for individual hair care also applies to the skin, because a hair care agent, when properly used, necessarily also comes in contact with the skin of the head. The skin, however, also requires individual care, depending on its individual nature. Hence, it will be clear to those skilled in the art that the cosmetic care preparation of the invention can advantageously be used for cosmetic care in general regardless of whether the cosmetic care is directed to the skin or its appendages (hair).

The hair or skin care preparation contains a hair care or skin care agent in at least one of its phases. The cosmetic care agent is preferably selected from among natural cosmetic care agents such as vegetable or animal oils, fats or waxes, silicone oils, cationic monomers and cationic polymers. The cosmetic care agent is selected most preferably from among D-panthenol, betaine, lanolin, avocado oil, orange oil, orange wax, lemon wax, apple wax, polydimethylsiloxane and a polymer of dimethylsiloxane with polyoxyethylene and polyoxypropylene side chains.

The cosmetic care agents can be present alone or in the form of a mixture, for example, as a mixture of different cationic surfactants or as a mixture of different cationic polymers or as a surfactant and

polymer mixture or as a mixture of oils, fats, waxes and derivatives thereof, or as a mixture of two or more of these substances.

Suitable cationic surfactants and cationic polymers comprise fatty amines, quaternary ammonium compounds, quaternary compounds of pyridine, morpholine or imidazoline or a mixture thereof, and cationic copolymers, cationic interpolymers, cationic polysaccharides, cationic cellulose derivatives, chitosan salts, cationic chitosan derivatives, cationic or cationized hydrolyzed proteins, such as collagen or keratin, or a mixture thereof.

Suitable cationic surfactants are, for example, Genamin® CTAC or cetyltrimethylammonium chloride, ester quats, for example tetradecylbetaine ester chloride, diester quats, for example dipalmitylethyldimethylammonium chloride (Armocare VGH 70, made by Akzo, Germany), or a mixture of distearylhydroxyethylmonium methosulfate and cetearyl alcohol (Dehyquat F-75, made by Henkel, Germany), diquaternary silicones, for example INCI<sup>1</sup> quaternium 80 (for example, Abil® Quat 3272 or Abil® Quat 3270, made by Th. Goldschmidt AG, Germany) or imidazolidinyl derivatives, for example INCI quaternium-87 (Rewoquat® W 575, made by Witco, Germany).

As regards the cationic polymers, suitable are, for example, Luviquat® FC 905 (copolymer of vinylimidazolium methochloride and vinylpyrrolidone, or polyquaternium-16) made by BASF, Germany, or Gafquat® 755-N (copolymer of vinylpyrrolidone and dimethylaminoethyl methacrylate or polyquaternium-11), made by ISP, New Jersey, USA, or Ucare Polymer JR 400 (polyquaternium-10), made by Amerchol, New Jersey, USA, or Merquat 550 (polyquaternium-7) made by Chemvicon, or Cosmedia Guar C 261 (hydroxypropylguar hydroxypropyltrimonium chloride), made by Henkel, Germany, or Jaguar C 13 S (guar hydroxypropyltrimonium chloride), made by Rhone Poulenc, France, or Lamequat L (lauryldimoniumhydroxypropyl hydrolyzed collagen), made by Henkel, or Gluadin WQ (lauryldimonium hydroxypropyl hydrolyzed wheat protein), made by Henkel, or Celquat L-200 (polyquaternium-4), made by National Starch, New Jersey, USA.

The cationic cosmetic care agents, particularly when they are surfactants, can be present in the preparation in an amount from 0.1 to 3.0 wt.%. Cationic polymers are preferably used in an amount from 0.1 to 5.0 wt.%. In general, the sum of cationic cosmetic care agents, regardless of whether they are surfactants or polymers, is preferably between 0.5 and 8.0 wt.%.

Examples of other cosmetic care agents are the silicone oils (for example, the cyclomethicones such as Dow Corning 345 Fluid, dimethicones such as Dow Corning 200 Fluid, amino-functional silicones such as SM 2115-D2 made by GE Silicones, silicone gums such as Toshiba XF 49-811, triglycerides such as avocado oil, fatty acids, fatty alcohols, easy-spreading oils such as isopropyl myristate, Cetiol

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<sup>1</sup> INCI = International Nomenclature of Cosmetic Ingredients - Translator

OE (dicaprylyl ether) or Eutanol G (octyldodecanol), obtainable from Henkel, Germany, waxes such as lanolin, apple wax, ilex resin, beeswax or jojoba oil, phospholipids such as lecithin, or ceramides, or petroleum fractions such as paraffin oils and waxes or vaseline.

Other suitable cosmetic care agents for the hair and skin care preparations of the invention are fatty acid esters, fatty alcohol ethers or fatty alcohol esters used, for example, in an amount from 0.1 to 10 wt.%. These compounds are derived from fatty acids or fatty alcohols with a linear or branched carbon chain with 6 to 40 carbon atoms and which are saturated or unsaturated and can also contain OH groups in the chain. Branched compounds occur in synthetic esters and ethers as well as in natural waxes. Unsaturated and hydroxylated fatty acids and fatty alcohols are found in triglycerides and waxes. Suitable compounds are, for example, wheat germ oil, sperm oil, lanolin alcohol derivatives and lanolin acid derivatives, octyl stearate (Cetiol® 868, made by Henkel), hexyl laurate (Cetiol® A, made by Henkel), dioctyl adipate (Arlamol® DOA, made by ICI), isopropyl myristate and octyl dodecanol (Eutanol® G, made by Henkel), spermaceti, beeswax, fruit waxes and other waxes. In addition to these fatty acid esters, fatty alcohol ethers or fatty alcohol esters, silicone oils can also be added to the preparations of the invention.

The fatty acid glycerides and esters can be synthetic or of natural origin, but preferably they are of natural origin.

Fatty acid glycerides can be used in the form of mixtures. A suitable and preferred mixture of fatty acid glycerides of natural origin is, for example, avocado oil or sunflower oil. Sunflower oil consists essentially of a mixture of fatty acid glycerides in which the following fatty acids are present: 4 to 9% of palmitic acid, about 1% of palmitoleic acid, 1 to 7% of stearic acid, 15 to 35% of oleic acid, 50 to 72% of linoleic acid, about 2% of linolenic acid, about 1% of arachidic acid and about 2% of behenic acid. Avocado oil consists essentially of a mixture of fatty acid glycerides in which the following fatty acids are present: 5 to 25% of palmitic acid, 1 to 10% of palmitoleic acid, about 3% of stearic acid, 54 to 74% of oleic acid, 6 to 16% of linoleic acid and about 3% of linolenic acid. Other suitable, particularly natural, oils consisting essentially of unsaturated fatty acid glycerides, are mink oil, olive oil, almond oil, palm oil, peanut oil, cottonseed oil, rapeseed oil, safflower oil and grapeseed oil.

The said esters, derived from a saturated or unsaturated fatty acid and a saturated or unsaturated fatty alcohol, can also be used in the form of a mixture. A suitable mixture of esters of natural origin derived from a fatty acid and a fatty alcohol is, for example, jojoba oil. Jojoba oil consists in essence of a mixture of esters derived from fatty acids and fatty alcohols wherein the following fatty acids are present: about 1 to 2% of palmitic acid, about 10% of stearic acid, about 71% of eicosenoic acid and about 13 to 14% of docosenoic acid. The esters can be present in phase (B) in an amount from 0.1 to 10 wt.%.

In general, the silicone compound or silicone oil used for the inner phase (B) can be any known silicone

cosmetic care agent. Suitable are, for example, low-viscosity silicone oils, hexamethyldisiloxane, polydi-methylsiloxanes (INCI: dimethicone), preferably with up to 8 monomer units, cyclic dimethylpoly-siloxane (INCI: cyclomethicone), for example cyclooctamethyltetrasiloxane, cyclodecamethylpenta-siloxane (for example, Dow Corning 244 Fluid or Dow Corning 200 Fluid), a polymer of dimethylsil-oxane with polyoxyethylene and polyoxypropylene side chains (INCI: dimethicone copolyol), for ex-ample Abil® B 8842, made by Goldschmidt, phenyltrimethicone (for example Abil® AV products, made by Goldschmidt), dimethiconol (for example Dow Corning 1401), alkyldimethicone (for example, Dow Corning 2502 and 2503) or amino-functional silicones (for example Dow Corning 939 or 8220), wherein the silicone compounds preferably have a viscosity below 100 mm<sup>2</sup>/s and particularly below 20 mm<sup>2</sup>/s. Mixtures of silicone compounds or silicone oils are also suitable. The silicone compounds or silicone oils can be used at a concentration from 0.02 to 20 wt. %.

For example, the outer phase (A) and/or the inner phase (B) can contain as the cosmetic care agent a mixture comprising at least one vegetable oil and tocopherol acetate dissolved in a volatile silicone oil. Another example of a mixture of cosmetic care agents is a mixture of cetyltrimethylammonium chloride and a cationic polymer which can also contain a solution of a strengthening polymer for increasing the volume of the hair and/or an antidandruff agent (for example, climbazole or zinc pyrithione) and/or a moisturizing agent (for example, a solution of panthenol or hyaluronic acid in water and/or glycerol) and/or a neutralizing agent (for example, a solution of glyoxylic acid in water to neutralize any oxidant that may not have been rinsed out).

Another example of an advantageous embodiment of a preparation containing a mixture of cosmetic care agents is a preparation wherein the inner phase (B) contains a mixture of cetylstearyl alcohol, glycerol monodistearate, lanolin, D-panthenol and cholesterol, whereas the outer phase (A) contains D-panthenol as the cosmetic care agent. The inner phase (B) can also consist essentially of perfume oil and a hydrophobic composition of one or more hair and/or skin care fats, oils or waxes, alone or in the form of a mixture.

A preferred cosmetic care preparation according to the present invention contains in phase (B) as the cosmetic care agents a combination of at least one saturated or unsaturated fatty acid glyceride, at least one ester derived from a saturated or unsaturated fatty acid and a saturated or unsaturated fatty alcohol, and at least one volatile silicone compound.

Substances other than the said cosmetic care agents may, of course, also be present, preferably in phase (B), alone or in the form of a mixture and even in admixture with the aforesaid substances. Examples thereof are lanolin derivatives, cholesterol, betaines, carnitine esters, amino acids, peptides, proteins, vitamins and mixtures thereof, used, for example, in an amount from 0.1 to 10.0 wt. %. A suitable protein is, for example, keratin in an amount from 0.1 to 4.0 wt. %. Examples of suitable amino acids are cysteine and alanine, used in an amount from 0.01 to 0.5 wt. %.



The two phases (A) and (B) can also contain cosmetic carriers or bases. By cosmetic carriers or bases are meant all materials, compounds or mixtures known to those skilled in the art, which in themselves have no, or no essential, cosmetic care effects.

In principle, those skilled in the art know which carriers and bases and which cosmetic care agents are used in hair and skin cosmetics. Hence, the following embodiments have only exemplifying character and are intended only as illustrations of the present invention. To this end, we refer the reader to, for example, the following technical literature: K. SCHRADER, "Grundlagen und Rezepturen der Kosmetika" [Fundamentals and Formulations of Cosmetics], 2nd edition, 1989, pp. 728-737, or DÖMSCH, A., "Die kosmetische Präparate" [Cosmetic Preparations], Verlag für chemische Industrie (H. Ziolkowsky, ed.), 4th edition, vol. 2, pp. 212-230, 1992.

The outer phase (A) with preferably low or no cosmetic care effect consists essentially of cosmetic carriers and bases. The cosmetic carriers and bases essentially have consistency-conferring properties and are usually referred to as solvents or thickeners.

Suitable for this purpose are all highly fluid aqueous and alcoholic fatty, oily, wax-like, polymeric, and viscous carriers. They include, for example, water, alcohols (for example, ethanol, propanol and isopropanol), viscous substances or thickeners (for example aluminum silicates), protein derivatives (for example hydrolyzed collagen) and polymers, either alone or in the form of a mixture.

The outer, continuous, transparent, highly viscous phase (A) is preferably free of emulsifiers and surfactants, whereas the inner phase (B) can contain same.

When the inner phase (B) is intended to be in the form of an emulsion, suitable surfactants are preferably the cationic or anionic surfactants. Anionic surfactants are used preferably when the ready-to-use product is to be formulated as a shampoo. In principle, however, those skilled in the art know which surfactants to use for what purpose.

Preferably used anionic surfactants are, for example, alkali metal, alkaline earth metal, ammonium or alkanolamine alkanesulfonates, alkylsulfates and alkyl ether sulfates with 12 to 18 carbon atoms in the alkyl group, and particularly the sodium or triethanolamine salts of lauryl or tetradecyl ether sulfates.

Suitable as amphoteric surfactants for the inner phase (B) are all amphoteric surfactants known to be used in cosmetic products, particularly those from the group of betaines, sulfobetaines, glycines, acetates or propionates, including the acid addition salts thereof. Among these, particularly well suited as amphoteric surfactants for phase (B) are the N-alkylbetaines, N-alkylaminobetaines, N-alkylsulfobetaines, N-alkylaminopropionates, alkyltrimethylammonium acetates and fatty acid alkylamidobetaines. Particularly preferred, however, are cocoamidopropylbetaines, cocoamphodipropionate, lauroamphocarboxyglycinate and cocoamphoacetate, including their acid addition salts, for example sodium coco-

amphoacetate. The said amphoteric surfactants can, of course, be used in phase (B) alone or in the form of a mixture.

Suitable as nonionic surfactants for phase (B) are all nonionic surfactants known to be used in cosmetic preparations. These are, for example, oxyethylated fatty alcohols (for example, Henkel's Eumulgin products) or fatty acid glycerides with 12 to 18 carbon atoms and up to 40 moles of ethylene oxide per mole of fatty alcohol. Examples of these are oxyethylated lauryl, tetradecyl, cetyl, oleyl and stearyl alcohol, alone or in the form of a mixture, as well as the fatty alcohols of oxyethylated lanolin, or oxyethylated lanolin. Other suitable nonionic surfactants or surfactant mixtures are fatty amine ethoxylates, fatty acid alkanolamide, sugar esters (for example sucrose esters such as the Ryoto products made by Syntapharm) and sugar ethers (for example, alkylpolyglucosides such as the Plantacare products made by Henkel), polyglyceryl esters, silicone surfactants (for example, oxyalkylated polysiloxanes such as Dow Corning Surfactant 193 or Dow Corning 5324 Fluid, or silicone-sugar copolymers (for example Wacker SPG 128) and oxyethylated sorbitan fatty acid esters.

The surfactants suitable for phase (B) can be used in an amount from 0.1 to 5.0 wt.% and preferably from 0.5 to 3.0 wt.%, based on the other constituents of phase (B).

It is advantageous, particularly for hair care, if phase (B) contains at least one substance with emulsifying or self-emulsifying, consistency-conferring properties. Suitable for this purpose are all known ionic emulsifiers (with carboxylic acid, sulfonic acid or sulfate ester groups), amphoteric emulsifiers (with basic or acid hydrophilic groups) or nonionic emulsifiers (for example, polyglycol ethers, fatty acid esters such as glycol fatty acid esters, glyceryl monofatty acid esters or sorbitan fatty acid esters) or at least one monoalcohol (or fatty alcohol). Suitable monoalcohols are monohydric, saturated or unsaturated, linear or branched alcohols with 6 to 30 carbon atoms, particularly with 8 to 26 carbon atoms, and preferably with 12 to 22 carbon atoms, or a mixture thereof. Examples of fatty alcohols are octanol, decanol, dodecanol or lauryl alcohol, tetradecanol or myristyl alcohol, hexadecanol or cetyl alcohol and octadecanol or stearyl alcohol, or mixtures of these fatty alcohols, for example a mixture of cetyl alcohol and stearyl alcohol (cetearyl alcohol). The monoalcohols or a mixture thereof can be used in an amount from 0.1 to 20.0 wt.% and preferably from 0.5 to 10.0 wt.%, based on the other constituents of phase (B).

Preferred cationic emulsifiers are alkyltrimethylammonium halides or dialkyldimethylammonium halides wherein the alkyl group consists of 8 to 18 carbon atoms.

Preferred anionic emulsifiers are, for example, the salts of fatty acids, fatty alcohol sulfates or alkylsulfates, alkylsulfonates or alkylphosphates, wherein the alkyl group consists of 8 to 18 carbon atoms.

Suitable consistency-conferring agents and thickening agents which must necessarily be present in the

highly viscous gel phase (A), but can also be contained in phase (B), are those thickeners which confer a yield point to the outer phase (A), for example agar, guar gum, alginates, xanthan gum, polyacrylate salts, acrylic acid polymers and copolymers and bridged acrylic acid polymers (INCI: carbomer). A particularly preferred thickening agent for phase (A) is a neutralized acrylic acid homopolymer bridged by an allyl ether of pentaerythritol or sucrose or propylene, for example Acrisint® 400, made by 3V Inc.

Suitable organic acids for adjusting the pH value which preferably is between 3 and 7 are, for example, formic, glyoxylic, acetic, phosphoric, lactic, tartaric or citric acid, with citric acid being particularly preferred.

Preferred is a cosmetic care agent, particularly one for hair care, wherein the inner phase (B) contains besides the perfume oil at least one fatty alcohol, at least one fatty acid ester and at least one silicone oil, and the gel phase (A) contains a mixture of a bridged acrylic acid polymer (for example, INCI: CARBOMER), aminomethylpropanol and a lower monoalcohol with 2 to 3 carbon atoms.

Particularly preferred is a hair care agent wherein the inner phase (B) contains, based on the total amount of the constituents of this phase, from 1 to 5 wt.% of perfume oil, from 1 to 8 wt.% of at least one fatty alcohol, from 0.5 to 3 wt.% of at least one fatty acid ester and from 0.2 to 1 wt.% of at least one silicone oil, and the gel phase (A) contains, based on the total amount of the constituents of this phase, from 0.1 to 2 wt.% of a mixture of a bridged acrylic acid polymer (for example, INCI: CARBOMER) neutralized with aminomethylpropanol or HCl, and 1 to 10 wt.% of a lower monoalcohol with 2 or 3 carbon atoms.

Both phases (A) and (B) of the preparation of the invention can additionally contain other known cosmetic additives, auxiliary agents and carriers, for example solvents such as water, lower aliphatic alcohols with 1 to 4 carbon atoms, for example ethanol, isopropanol or propanol, or polyols such as glycerol or 1,2-propylene glycol. The solvents are used in each of the two phases preferably in an amount from 0.5 to 90 wt.%. The water content of each of the two phases is preferably from 70 to 95 wt.% and particularly from 80 to 93 wt.%.

Both phases, but particularly phase (B), can contain an opacifying agent such as ethylene glycol distearate in an amount from 0.2 to 5 wt.%, wetting agents or emulsifiers selected from the class consisting of anionic, cationic, amphoteric or nonionic surfactants, such as fatty alcohol sulfates, alkylbenzenesulfonates, alkyltrimethylammonium salts, alkylbetaines, ethoxylated fatty alcohols, ethoxylated nonylphenols or ethoxylated fatty acid esters, in an amount from 0.1 to 10 wt.%, furthermore bactericides and fungicides, pH buffering agents, moisturizers, colorants (for example, natural or synthetic direct dyes, as well as tinting agents, for example fluorescein sodium salt), sunscreen agents or UV filters, preservatives, antioxidants (for example tocopherols), pyrogenic silicic acid, complexing agents, antidandruff agents as well as bases, salts (for example sodium chloride or sodium sulfate), buffers (for example sodium citrate or sodium phosphate), consistency-conferring

agents and natural, modified or partly or fully synthetic polymers (for example chitosan, Fmoc chitosan or polyvinylpyrrolidone [PVP]).

Examples of suitable preservatives are esters of para-hydroxybenzoic acid, 4,4-trichloro-2-hydroxyphenyl ethers [sic - Translator], methylchloroisothiazolinone, plant extracts, for example nettle extract or camomile extract, used in an amount from 0.05 to 2.0 wt.%. Suitable sunscreen agents or UV filters are, for example, isoamyl p-methoxycinnamate, lipophilic cinnamate esters, salicylate esters, 4-aminobenzoic acid derivatives or the hydrophilic sulfonic acid derivatives of benzophenone or of 3-benzylidenecamphor, used in an amount from 0.01 to 2.0 wt.%. Suitable vitamins are, for example, vitamin C, vitamin E or biotin, used in an amount from 0.1 to 2.0 wt.%. Suitable antioxidants, for example tocopherols, can be used in an amount from 0.001 to 1 wt.%.

Suitable dyes are any known physiologically innocuous dyes. These dyes can have the function of an indicator of the intensity of the desired cosmetic care effect or of the amount of the perfume oil or cosmetic care agent contained in the inner phase (B), and can thus act as an apportioning control. For this purpose, such a dye is added to the inner phase (B). Suitable dyes are those which preferably exert no dyeing effect on the hair or the skin, for example fluorescein sodium salt. Such a colored indicator is advantageous for the inner phase (B) when a gel, paste or cream or some other formulation is used that has a consistency suitable for this purpose. The dyes can also confer to the two phases different optical appearance. Thus, the two phases can be colored differently or they can be of the same color but the colors can be of different intensities. Preferably, the color of the outer phase (A) is less intense than that of the inner phase (B). In a special embodiment, the inner phase (B) contains a nacreous pigment which confers to phase (B) a highly esthetic, pearlescent appearance, particularly when the base color of the inner phase (B) is white and said phase is present in discrete volumes in the form of spheres.

Dyes, however, can also be added to the cosmetic care agent when said cosmetic care agent contains a hair colorant or hair-tinting agent which has lasting hair-coloring properties. Suitable to this end are all dyes known to be used for this purpose. Examples of such dyes are the known nitro dyes from the group of nitro-substituted and amino-substituted benzenes, benzonitriles or benzamides. The known azo dyes or quinone dyes and the natural dyes such as henna, indigo or juglone, however, can also be used. Finally, the inner phase (B) can also contain oxidation dyes which are sensitive to oxidants, particularly atmospheric oxygen. These are, for example, p-phenylenediamine, 2-hydroxyethyl-p-phenylenediamine, 2-methyl-p-phenylenediamine, resorcinol and m-aminophenol. In the preparations of the invention, the outer phase protects the oxidation dyes from contact with atmospheric oxygen up to the time of use.

The outer phase (A) and the inner phase (B) can be used in any weight ratio that is appropriate for the desired purpose or desired effect. The preferred weight ratio of outer phase (A) to inner phase (B) is from 10:1 to 1:1, and particularly from 8:1 to 4:1.

In general, it may be assumed that when the preparation of the invention is used for hair or skin treatment, the two phases are mixed within 10 minutes, preferably within 2 minutes and particularly within 1 minute before use.

In the event that the preparation of the invention is used as a hair care treatment, said preparation can, depending on the formulation, either remain on the hair (leave-on conditioner) or it can be rinsed out with water after an exposure time of 1 to 30 minutes, preferably 2 to 20 minutes and particularly 2 to 10 minutes. The preferred formulation is that of a hair care preparation that remains on the hair. In the event that the intended use is in the form of a skin care preparation, the exposure time can also be permanent and last for hours or days without being followed by rinsing.

The preparation in the form of a highly viscous transparent gel can be introduced and offered for sale in any rigid or deformable, preferably transparent, container commonly used for a cosmetic product, for example in a transparent can, bottle or tube. It is preferably introduced into a transparent container provided with a mechanically, preferably manually actuated pumping device. Containers with a manually actuated pumping device used for this purpose are known from the prior art, for example from Euro-pean Patents EP-A 0 900 744 and EP-A 0 900 598.

A particular advantage of the cosmetic care agent of the invention lies in the chemical and/or physical stability of its material composition and also in that of the usable concentrations of the compositions of the outer phase (A) and the inner phase (B). Examples of these are the stability of the pH value or of the emulsions during storage of the product. Conventional products have the drawback that the compositions and concentrations of the auxiliary agents, carriers and cosmetic care agents are often chemically and/or physically unstable when they are in the form of mixtures.

Separating, according to the invention, the perfume oil from the carriers and adding the perfume oil contained in the inner phase (B) to the ready-to-use final product only just before the intended application ensures, on the one hand, the odor stability of the perfume oil during storage and, on the other, an intense odor sensation on the skin and the hair.

In a preferred embodiment, phase (B) contains at least one substance which upon extended contact is incompatible with at least one constituent of phase (A). Such a substance is, for example, a dye, particularly a dye that is readily oxidized by atmospheric oxygen, or a vitamin, for example ascorbic acid.

The invention also relates to a method of hair and skin care, characterized in that in the case of an aforescribed preparation, phases (A) and (B) are mixed with each other mechanically just before use and the mixture is applied to the hair or skin. The mixing is preferably carried out by delivering the preparation through a mixing nozzle which in itself is known or through a mixing valve which in itself is known.

The cosmetic care preparation according to the invention can thus be used advantageously for the care of hair and skin so that the present invention also covers the use of the cosmetic care preparation of the invention directed to these applications.

The following example will illustrate in greater detail the object of the invention without limiting its scope.

#### EXAMPLE 1: LEAVE-ON HAIR TREATMENT PREPARATION

##### *Outer highly viscous gel phase (A)*

0.6000 g	of bridged acrylic acid polymer (INCI: CARBOMER)
0.4500 g	of aminomethylpropanol
0.5000 g	of D-panthenol
0.1000 g	of sunscreen agent
0.0003 g	of dye
1.0000 g	of polydimethylsiloxane - ethylene glycol copolymer
8.0000 g	of ethanol
brought to 100.0000 g	with demineralized water

##### *Inner phase (B)*

2.0 g	of perfume oil
6.0 g	of cetylstearyl alcohol
2.0 g	of glyceryl monodistearate
3.0 g	of lanolin
1.1 g	of sodium cetylstearylsulfate
0.3 g	of polydimethylsiloxane
0.3 g	of preservative
brought to 100.0 g	with demineralized water

Fifteen grams of the creamy inner phase (B) was incorporated into 85 g of the highly viscous outer gel phase (A), previously charged to a transparent can, through needle-shaped nozzles so that the inner phase (B) assumed the form of uniformly distributed, spherical, discrete volumes with an 8-mm diameter. Gel phase (A) presented a yield point and a viscosity of 16,500 mPa.s at 25 °C as determined with a Haake model VT 501 rotational viscometer at a shearing rate of 12.9 per second. The can was sealed with a manually actuated pump mixing valve. A quantity of 10 cm<sup>3</sup> was removed through the valve and showed nearly homogeneous mixing. The mixture produced a strong odor sensation. After

shampooing, it was applied to towel-dried, slightly damaged hair. The leave-on hair conditioner was not rinsed off. It imparted to the hair a pleasant odor, a well-groomed feel and good combability, without an excessive residue build-up.

## EXAMPLE 2 - LEAVE-ON HAIR TREATMENT PREPARATION

### *Outer highly viscous gel phase (A)*

0.4000 g	of bridged acrylic acid polymer (INCI: CARBOMER)
0.0500 g	of NaOH
0.0005 g	of dye
0.2000 g	of glycerol
10.0000 g	of ethanol
brought to 100.0000 g	with demineralized water

### *Inner phase (B)*

1.5 g	of perfume oil
3.0 g	of cetylstearyl alcohol
1.0 g	of glycerol monodistearate
5.0 g	of lanolin
1.0 g	of sodium cetylstearylsulfate
0.3 g	of polydimethylsiloxane
0.5 g	of betaine
0.3 g	of preservative
brought to 100.0 g	with demineralized water

Twenty grams of the creamy inner phase (B) was incorporated into 80 g of the highly viscous outer gel phase (A), previously charged to a transparent can, through needle-shaped nozzles so that the inner phase (B) assumed the form of uniformly distributed, spherical, discrete volumes with an 8-mm diameter. Gel phase (A) presented a yield point and a viscosity of 12,000 mPa.s at 25 °C as determined with a Haake model VT 501 rotational viscometer at a shearing rate of 12.9 per second. The can was sealed with a manually actuated pump mixing valve. A quantity of 10 cm<sup>3</sup> was removed through the valve and showed nearly homogeneous mixing. The mixture produced a strong odor sensation. After shampooing, it was applied to towel-dried, slightly damaged hair. The leave-on hair conditioner imparted to the hair a pleasant odor, a well-groomed feel and good combability, without an excessive residue build-up.

## PATENT CLAIMS

1. Cosmetic hair or skin treatment preparation containing a continuous, transparent, clear or opaque, highly viscous outer gel phase (A) and therein a homogeneous inner phase (B) entirely visible through phase (A), characterized in that phase (B)
  - has an optical appearance different from that of the outer phase (A),
  - contains at least 0.5 wt.% of a perfume oil, based on the weight of phase (B), and
  - has no outer covering, andphases (A) and (B) do not mix spontaneously with one another after being in contact for at least 3 months at 30 °C.
2. Preparation according to Claim 1, characterized in that phases (A) and (B) are readily mechanically miscible with one another.
3. Preparation according to Claim 1 or 2, characterized in that phase (A) has a viscosity of at least 5000 mPa.s at 25 °C, determined with a Haake model VT 501 rotational viscometer at a shearing rate of 12.9 per second.
4. Preparation according to one of Claims 1 to 3, characterized in that phase (A) has a viscosity of 5000 to 100,000 mPa.s at 25 °C, determined with a Haake model VT 501 rotational viscometer at a shearing rate of 12.9 per second.
5. Preparation according to one of Claims 1 to 4, characterized in that the outer phase (A) presents a yield point.
6. Preparation according to one of Claims 1 to 5, characterized in that the inner phase (B) is uniformly distributed in the outer phase (A).
7. Preparation according to one of Claims 1 to 6, characterized in that phase (A) contains a thickener selected from among agar, guar gum, alginates, xanthan gum, polyacrylate salts, acrylic acid polymers and copolymers and bridged acrylic acid polymers.
8. Preparation according to Claim 7, characterized in that the thickener is a neutralized acrylic acid homopolymer bridged with an allyl ether of pentaerythritol or sucrose or propylene.
9. Preparation according to one of Claims 1 to 8, characterized in that phase (B) is in the form of individual, discrete volumes amounting to at least 0.1 cm<sup>3</sup>.
10. Preparation according to one of Claims 1 to 9, characterized in that the discrete volumes of phase (B) are spherical and have a diameter of at least 5 mm.



11. Preparation according to one of Claims 1 to 10, characterized in that it is a hair care preparation and at least one of phases (A) or (B) contains a cosmetic care agent.
12. Preparation according to Claim 11, characterized in that the cosmetic care agent is selected from among the natural cosmetic care agents, vegetable or animal oils or waxes, silicone oils, cationic monomers or cationic polymers.
13. Preparation according to Claim 12, characterized in that the cosmetic care agent is selected from among D-panthenol, betaine, lanolin, avocado oil, orange oil, orange wax, lemon wax, apple wax, polydimethylsiloxane and a polymer of dimethylsiloxane with polyoxyethylene and polyoxypropylene side chains.
14. Preparation according to one of Claims 1 to 13, characterized in that phase (A) contains at least one substance which upon prolonged contact is incompatible with at least one of the constituents of phase (B).
15. Preparation according to Claim 14, characterized in that phase (A) contains at least one dye or vitamin which upon prolonged contact is incompatible with at least one of the constituents of phase (B).
16. Method of skin and hair treatment, characterized in that, in the case of a preparation according to one of Claims 1 to 15, phases (A) and (B) are mechanically mixed with one another just before use, and the mixture is applied to the hair or the skin.
17. Method according to Claim 16, characterized in that the mixing is carried out by delivering the preparation through a mixing nozzle that in itself is known or through a mixing valve that in itself is known.
18. Use of a preparation according to one of Claims 1 to 15 for the care of human hair.

### SUMMARY

Cosmetic preparation for hair or skin treatment which contains a continuous, transparent, clear or opaque, highly viscous outer gel phase (A) in which is, preferably uniformly, distributed a homogeneous perfume oil-containing inner phase (B), visible through phase (A), wherein phases (A) and (B) do not mix spontaneously with one another when in contact for at least 3 months at 30 °C.

Separating, according to the invention, the perfume oil from the carriers and adding the perfume oil contained in the inner phase (B) to the ready-to-use final product only just before the intended application ensures, on the one hand, the odor stability of the perfume oil during storage and, on the other, an intense odor sensation on the skin and the hair.

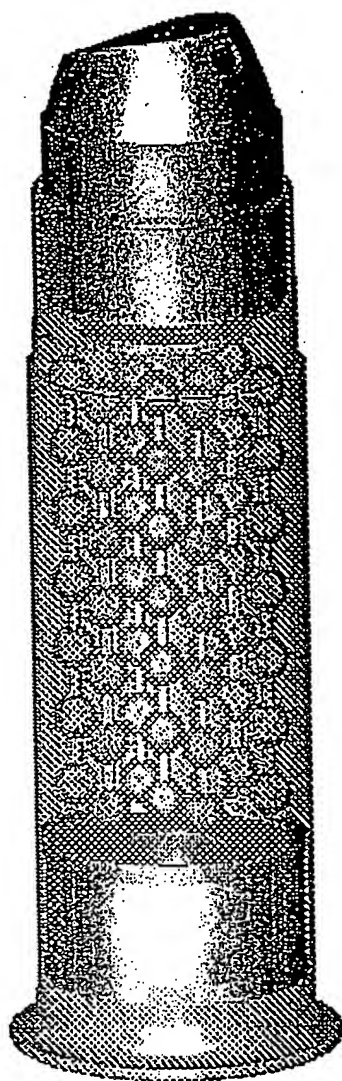


Figure 1

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